UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

DATE: JAN 14 2014

SUBJECT: Mid-America Steel Drum Company, Inc.
8570 South Chicago Road, Oak Creek, WI 53154

FROM: Dakota Prentice, Environmental Engineer
Air Enforcement and Compliance Assurance Section (IL/IN)

THRU: Nathan Frank, Chief
Air Enforcement and Compliance Assurance Section (IL/IN)

TO: File

INSPECTION OVERVIEW

Name
Mid-America Steel Drum Company, Inc.

Location
8570 South Chicago Road, Oak Creek, WI 53154

Inspection Date
December 9, 2013

Attendees
Katharine Owens, EPA, Environmental Engineer
Dakota Prentice, EPA, Environmental Engineer
Scott Swosinski, Mid-America Steel Drum Company, Inc., V.P. of Operations

Company Contact
Scott Swosinski
V.P. of Operations
414.762.1114

Company Overview
Mid-America Steel Drum Company, Inc. ("Mid-America") operates a drum reconditioning facility ("the facility"). The facility receives used drums from various industries and reconditions the drums by either washing the drums or by removing existing coatings with an incinerator and applying new coatings.

Environmental Justice
The EPA uses a nationally consistent environmental justice screening tool (EJSCREEN) to identify areas with potentially disproportionately high environmental and public health burdens. It combines a set of indicators in the categories of health, environment, and social demographics, to identify, in an analytically

rigorous and consistent manner, potential disproportionately and adversely affected areas. According to the EJSCREEN, Mid-America is not located in an EJ area based on the 12 Primary EJ Indexes.

Regulatory Overview

The facility is considered a major source under the Clean Air Act (CAA). Mid-America operates under a Renewal of Part 70 Source Operation Permit, Permit No. 241021220-P10, issued on June 11, 2013, by Wisconsin Department of Natural Resources (WDNR).

The facility is subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products at 40 C.F.R. Part 63, Subpart MMMM (NESHAP MMMM).

ARRIVAL AND OPENING CONFERENCE

We (Katharine Owens and Dakota Prentice of EPA) arrived at the Mid-America facility located in Oak Creek, Wisconsin at approximately 9:30 AM on December 9, 2013. We notified a receptionist of our presence and requested to speak to someone regarding environmental compliance. We were met by Scott Swosinski, V.P. of Operations for the facility, who directed us to a conference room. We stated the purpose of our visit was to determine the facility's compliance with the CAA. We showed him our credentials and started the opening conference.

We told Mr. Swosinski that we would like a process based overview of operations at the facility, focusing on air emissions and pollution control equipment, and a plant tour. We told him that we would be checking compliance with the facility's air permit issued by WDNR. We informed him that we would end the inspection with a closing conference. We explained that if we discussed anything Mid-America considered confidential business information (CBI), they should let us know and we would treat it as such. No CBI was collected during the inspection.

Mr. Swosinski provided background information on facility operations. Mid-America started operations at the facility in 1975 to refurbish 55-gallon steel drums. Prior to Mid-America, other business occupied the property. The facility currently has approximately 75 employees and operates on one shift from 6:00 AM to 8:30 PM.

Process Overview

Steel drum refurbishing at the facility starts with the delivery of 55-gallon steel drums via truck. These drums are classified as either open head drums or tight head drums. Open head drums have had the top of the drum removed. Tight head drums have the tops in place and the interior is only accessible through the bung opening. The drums are brought to the facility in what Mr. Swosinski described as "RCRA empty." "RCRA empty" was described as the drum having less than one inch of material remaining in the drum.

Tight head drums are taken to a washing line where the interiors of the drums are washed with hot water and caustic soda through the bung opening. The drums are then manually inspected. If the interior was cleaned in the wash cycle, reconditioning of the drum is complete. If the interior was not cleaned satisfactorily, the top of the drum is removed to create an open head drum. The drum is then moved to the open head drum reconditioning line.

Open head drums are tipped upside down and placed on a conveyer. The conveyer moves the drums through a drum furnace. At the drum furnace, paints/coatings, labels, and residual material within the drum is incinerated. The drum furnace operates at a rate of approximately 200 drums per hour.

Emissions from the drum furnace are controlled by a thermal oxidizer. The thermal oxidizer has four natural gas burners and operates at 1700 ^{O}F or 1750 ^{O}F (Mr. Swosinski was unsure of the setpoint). The temperature of the thermal oxidizer is recorded on a circle chart and an alarm is in place to alert facility personnel if the temperature drops below the setpoint.

After the drum furnace, the drums are moved to a shot blast unit. The shot blast unit uses metal shot to remove ash residual remaining on the drums from the drum furnace and to prepare the drums for the coating processes that follow. If needed, the drums go to a reshaping unit to remove significant deformities in the drum.

The facility has two coating lines, one line for exterior coating and one line for interior coating. Mr. Swosinski stated that exterior coatings are water based and do not contain any volatile organic compounds (VOCs) or hazardous air pollutants (HAPs). The interior coating line uses one coating product. This coating product was described by Mr. Swosinski as "3.5 compliant" as the coating has less than 3.5 pounds of VOCs per gallon of coating. Mr. Swosinski was not entirely sure how the facility complied with NESHAP MMMM. Mr. Swosinski stated that the interior coating is used for rust and chemical resistance and is also "FDA compliant."

After the coatings are applied, the drums move to a curing unit. The curing unit operates at approximately 425 - 475 ^{O}F and uses heat to dry the coatings on the drums. The drums spend approximately seven minutes in the curing unit. Emissions from the curing unit are not controlled.

After curing the drums are loaded back onto trucks for delivery to Mid-America's customers.

SITE TOUR

We started the tour of the facility at approximately 10:00 AM. The facility tour was provided by Mr. Swosinski. We were shown the entire drum refurbishing process. At the tight head line we were shown drum washing and inspection. At the open head line we were shown the drum furnace, which was operating at approximately 1756 ^{O}F. We also witnessed interior and exterior coating lines while in operation. During the site tour, Mr. Swosinski stated that the drums are 18 gauge steel or lighter.

CLOSING CONFERENCE

Following completion of the plant tour, we returned to the conference room for a closing conference. We told Mr. Swosinski that we may follow-up the inspection with a CAA Section 114 Information Request, and that he could contact us directly for a copy of the inspection report.

We requested and were provided with a copy of the summary of the most recent performance test for the thermal oxidizer (2007), a copy of the MSDS for the solvent based interior coating, and a facility diagram. The performance test indicated that the thermal oxidizer was not in compliance with particulate matter emission limits. Mr. Swosinski acknowledged the test result but stated that this exceedance had been dealt with through WDNR. He was not sure exactly how the exceedance was resolved. We confirmed that none of the materials or information he shared with us should be considered CBI. We thanked him for his time and left the facility at approximately 11:00 AM.

Records Obtained

Drum Reclamation Furnace Performance Test Summary
MSDS for Solvent-Based Coating
Facility Diagram

SUMMARY

On November 21, 2007, Environmental Technology & Engineering Corp. personnel performed stack emissions testing at the Mid-America Steel Drum Company facility located in Oak Creek, Wisconsin. The tests were performed as a provision of an Air Pollution Control Permit issued by the State of Wisconsin Department of Natural Resources. Tests were performed on one stack from a drum reclamation furnace in order to determine compliance with the applicable particulate and visible emission limitations. All measured emissions and the permit limits are shown in the following tables:

TEST NO.	PARTICULATE EMISSION RATE	VISIBLE EMISSIONS
1	2.35 lb/hr	10.4 %
2	1.58	2.7
3	2.76	2.1
AVERAGE	2.23 lb/hr	5.1
DNR LIMITS	2.05 lb/hr	20 %
% OF DNR LIMIT	108.8 %	25.3 %

Measured particulate emissions were **slightly above** the DNR permit limits. Visible emissions were also observed to be **well below** the permit limit of 20 %.

M A T E R I A L S A F E T Y D A T A S H E E T

Product Code: 106R350
Product Name: 3.50 VOC RED STERILKOTE 300

Hentzen Coatings, Inc., 6937 W. Mill Road, Milwaukee, WI 53218-1225

Chemtrec 24-hour Emergency Phone: 800-424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

(See top of page)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component/Exposure Limits	CAS#	% by Wt.
ACETONE	67-64-1	27.97
ACGIH TLV/TWA 500PPM, 1188MG/M3, STEL/CEIL: 750PPM OSHA PEL - 1000PPM, 2400MG/M3 OTHER LIMITS: NIOSH REL/TWA: 250PPM,590MG/M3		
BISPHENOL A/EPICHLOROHYDRIN BASED EPOXY RESIN	25036-25-3	10-20%
ACGIH TLV/TWA -NOT ESTABLISHED OSHA PEL - NOT ESTABLISHED OTHER INFORMATION: THE BASIC RAW MATERIALS (BPA AND ECH) ARE CONSUMED IN THE RESIN REACTION MANUFACTURING PROCESS.		
ETHYLENE GLYCOL BUTYL ETHER	111-76-2	16.15
ACGIH TLV/TWA - 20 PPM, 97MG/M3 OSHA PEL - 50 PPM, 240MG/M3 OTHER INFORMATION: Skin Notation OTHER LIMITS: NIOSH REL/TWA: 5PPM, 24MG/M3 Skin Notation		
PROPYLENE CARBONATE	108-32-7	13.43
IRON OXIDE	1309-37-1	10-20%
ACGIH TLV/TWA - 5.0 MG/M3 OSHA PEL - 10.0 MG/M3		
BUTYL ALCOHOL	71-36-3	2.34
ACGIH TLV/TWA - 20 PPM TWA, 61 MG/M3 OSHA PEL - 100PPM TWA; 300 MG/M3 TWA OTHER LIMITS: NIOSH REL; STEL/CEIL: 50PPM,150MG/M3 OTHER INFORMATION: Skin Notation: Potential for dermal absorption.		

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

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Product Name: 3.50 VOC RED STERILKOTE 300

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Harmful if inhaled. May cause the following effects:
Nose, throat and respitory tract irritation. Allergic respitory reaction.
May cause lung damage. Eye and skin irritation. Allergic skin reaction.

FLAMMABLE LIQUID

Keep away from heat, sparks, and flame.
Vapors may cause flash fire.
Toxic gases/fumes are given off during burning or thermal decomposition.

EYE CONTACT:
Severe irritant. Prolonged contact may result in chemical burns to the eyes. Blindness may occur.

SKIN CONTACT:
Severe irritant. Contact with skin causes severe irritation and pain. Prolonged contact may result in chemical burns. Product may be absorbed through the skin in harmful amounts.

PRIMARY ROUTES OF ENTRY:
Skin absorption.
Dermal and inhalation.

INGESTION:
If swallowed, consult a physician immediately.

INHALATION:
Anesthetic. Can cause irritation of the respiratory tract or acute nervous system depression characterized by the following progressive steps if severe overexposure is continued: headache, dizziness, staggering gait, confusion or unconsciousness.

CHRONIC INFORMATION:
See Section 11.

CARCINOGENICITY:
See Section 11.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:
Asthma and other respiratory ailments; chemical sensitization.

4. FIRST AID MEASURES

EYE CONTACT:
Flush immediately with large amounts of running water for at least 15 minutes while lifting eyelids. Take to a physician for medical treatment.

SKIN CONTACT:
Wash affected areas with soap and water. Remove contaminated clothing and wash before reuse. Consult a physician if irritation develops or persists.

INGESTION:
If swallowed, CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

INHALATION:
Remove from exposure. Restore breathing. Keep warm and quiet. Notify a physician.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION PROPERTIES:

FLASH POINT (deg.F):
-4.0
METHOD:
Tag Closed Cup

FLAMMABLE LIMITS % :
Lower limit: 1.1
Upper limit: 32.5
AUTOIGNITION TEMPERATURE:
N/A

EXTINGUISHING MEDIA:
Carbon Dioxide, Dry Chemical or Foam.

FIREFIGHTING PROCEDURES AND EQUIPTMENT:
Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flames.
Closed container may explode when exposed to extreme heat.
Do not apply to hot surfaces. Never use welding or cutting torch on or near product container (even empty) because product (even residue) can ignite explosively.
Full protective equipment including self-contained breathing apparatus should be worn.
Water spray may be ineffective. Water may be used to cool

closed containers to prevent pressure build-up or possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED :
Evacuate all non-essential personnel and remove all sources of ignition (flames, hot surfaces, electrical, static and frictional sparks). Ventilate area. Equip clean-up crew with appropriate protective equipment. Avoid breathing vapors. Avoid skin contact. Prevent entry into drains, sewers and waterways. Notify appropriate authorities if necessary. Contain and remove with inert absorbent and nonsparking tools.

7. HANDLING AND STORAGE

HANDLING:
Use only with adequate ventilation. Avoid prolonged breathing of vapors. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates that vapor/mist levels are below applicable exposure limits. Follow respirator manufacturer's directions for use.
Use grounding and bonding connection when transferring material to prevent static discharge, fire or explosion. Avoid free fall of liquid in excess of a few inches. Use sparkproof tools and explosion proof equipment.

STORAGE:
Do not store above 120 F or below 32 F. Store large quantities in buildings designed to comply with OSHA's 29 CFR 1910.106. Keep away from heat, sparks and open flame. Keep containers closed when not in use. Keep closures tight and upright to prevent leakage.
Emptied containers may retain hazardous residue. Follow all hazard precautions in this data sheet until container is thoroughly cleaned or destroyed. To avoid spontaneous combustion during temporary storage, soak soiled rags and waste immediately after use in a water-filled, closed container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product Code: 106R350
Product Name: 3.50 VOC RED STERILKOTE 300

Hentzen Coatings, Inc., 6937 W. Mill Road, Milwaukee, WI 53218-1225

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ENGINEERING CONTROLS:
Provide general dilution or local exhaust ventilation in volume and pattern to keep the air contaminant concentration below current applicable OSHA safety and health requirements in the mixing, application and curing areas; and to remove decomposition products during welding and flame cutting on surfaces coated with this product.

RESPIRATORY PROTECTION:
When spray applied and when used in limited ventilation areas, wear a NIOSH/MSHA approved organic vapor/particulate respirator designed to remove a combination of particulate, gas and vapor. When used in confined areas or poorly ventilated areas, use a NIOSH/MSHA approved air line type respirator or hood. During sanding or grinding operations, use a NIOSH approved particulate respirator to remove solid airborne particles of sanding dust. Use NIOSH approved respirators when flame cutting, welding or hazing material coated with this product. Observe OSHA regulations for respirator use (29 CFR 1910.134). Air monitoring of the workplace may be required to determine appropriate respirator selection.

EYE PROTECTION:
Use safety eyewear with splash guards or side shields. A full face shield may be appropriate. Contact lenses should not be worn.

SKIN PROTECTION:
It is good industrial hygiene practice to minimize skin contact. Chemical resistant gloves are required for prolonged or repeated contact. An apron may be appropriate to protect against skin contact. Prevent prolonged skin contact with contaminated clothing. Wash contaminated clothing before reuse.

OTHER PROTECTIVE EQUIPMENT AND GUIDLINES:
Safety showers and eye wash stations should be available. Educate and train employees in the safe use of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:
Liquid.
APPEARANCE:
Opaque.
ODOR:
Solvent odor.
VOC (LB/GL):
3.48 lb/gl
VOC (grams/liter):
417 g/l
WEIGHT PER GALLON:
8.8128 lb/gl
SPECIFIC GRAVITY:
1.0584
%EXEMPT SOLVENT by WEIGHT:
41.838
%EXEMPT SOLVENT by VOLUME:
49.408
BOILING POINT (deg. F):
133
WATER SOLUBILITY:
Negligible.
FREEZING POINT (deg. F):
N/A

10. STABILITY AND REACTIVITY

STABILITY:
Stable under normal conditions.

HAZARDOUS POLYMERZATION:
Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:
May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain the following:
Carbon Monoxide, Carbon Dioxide and other toxic vapors depending upon the temperature reached.

INCOMPATIBILITIES (MATERIALS TO AVOID):
Strong oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:
n-Butyl Alcohol:

LD50 Oral Rat = 790mg/kg

LC50 Inhalation Rat = 8000 ppm for 4 hours
LD50 Oral Mouse = 2680 mg/kg
LD50 Dermal Rabbit = 3400mg/kg

Has not been tested as a whole for acute effects.

CHRONIC EFFECTS:
n-Butyl alcohol has been shown to affect the auditory nerve and possibly produce loss of hearing.
Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage, liver and kidney damage. Long term overexposure effects are not currently known.

Has not been tested as a whole for chronic effects.

CARCINOGENICITY:

Has not been tested as a whole for carcinogenicity effects.

MUTAGENICITY:

Has not been tested as a whole for mutagenicity effects.

REPRODUCTIVE EFFECTS:

Has not been tested as a whole for reproductive effects.

DEVELOPMENTAL EFFECTS:

Has not been tested as a whole for developmental effects.

12. ECOLOGICAL INFORMATION

ECOLOGICAL EFFECTS:
Has not been tested as a whole for ecological effects.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:
Recycle, fuel blend or incinerate.
Dispose of in accordance with applicable laws and regulations. It is the responsibility of the owner of the waste to dispose of it properly. Laboratory analysis is recommended to profile the waste for proper disposal determination.

U.S E.P.A WASTE NUMBER AND DESCRIPTION:

Product Code: 106R350
Product Name: 3.50 VOC RED STERILKOTE 300

Hentzen Coatings, Inc., 6937 W. Mill Road, Milwaukee, WI 53218-1225

Chemtrec 24-hour Emergency Phone: 800-424-9300

D001 Waste Paint

HAZARDOUS WASTE CHARACTERISTICS:
Ignitable.

14. TRANSPORT INFORMATION

UN NUMBER:
UN 1263

DOT PROPER SHIPPING NAME:
Paint

DOT HAZARD CLASS:
3

DOT LABEL:
Flammable Liquid

DOT PACKAGING GROUP:
PG II

U.S POSTAL SERVICE:
Will not handle.

15. REGULATORY INFORMATION

(Not meant to be all inclusive - selected regulations represented)

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:
CAS#111-76-2 Ethylene Glycol Butyl Ether
CAS#71-36-3 n-Butyl Alcohol

TSCA STATUS:
All ingredients are listed on the TSCA inventory.

STATE REGULATIONS:
This product may contain chemicals that fall under individual state Right-to-Know regulatory requirements. See Section 2 for material listings. For details on regulatory requirements, contact the appropriate agency in your state.

16. OTHER INFORMATION

Product Code: 106R350
Product Name: 3.50 VOC RED STERILKOTE 300

Hentzen Coatings, Inc., 6937 W. Mill Road, Milwaukee, WI 53218-1225

Chemtrec 24-hour Emergency Phone: 800-424-9300

Date of issue: 4/27/2010

Last Revision Date: 04/12/10

HMIS Information
HEALTH: 2*
FLAMMABILITY: 3
REACTIVITY: 1
PERSONAL PROTECTIVE EQUIPMENT: X

DISCLAIMER:
This MSDS is provided as an informational resource only. The information is received from a combination of sources, including raw material suppliers and is believed to be reliable and accurate. It does not intend to be all-inclusive and shall only be used as a guide. Changing reporting requirements and other uncontrolled variables make it impossible to guarantee the accuracy of the information contained in this document. It is the responsibility of the user to verify its information as well as determine the proper personal protection based on conditions of use. The buyer assumes all responsibility for the use and handling of this product in accordance with the Federal, State and Local laws and regulations. Hentzen Coatings, Inc. makes no representation or warranty regarding the accuracy of this information nor that the information or data will not change.

Mid-America Steel Drum

returnlend 12/9/2013 415.95' K. owens — 1650 is low limit

@ 10:25

CHICAGO & NORTHWESTERN RAILROAD

1756 — thermal oxidizer temp